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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/750,524	12/28/2000	Geoffrey W. Peters	INTL-0428-US (P9134)	6671

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EXAMINER

TABATABAI, ABOLFAZL

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 01/15/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/750,524

Applicant(s)

PETERS, GEOFFREY W.

Examiner

Abolfazl Tabatabai

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11 and 13-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-11 and 13-130 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Response to Amendment/Arguments

1. Applicant's arguments, (page 8 and 9), filed on October 20, with respect to the rejection(s) of claim(s) 1, 8, 14, 23 and 28 under Sotoda et al (U S 5,835,641) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sotoda et al (U S 5,835,641) and Doi et al (U S 6,456,728 B1).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-11, 13-17 and 28-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Sotoda et al (U S 5,835,641) in view of Doi et al (U S 6,456,728 B1).

Regarding claim 1, Sotoda discloses an image pick-up apparatus and method for detecting and enlarging registered objects which comprising:

detecting a color characteristic (column 15, lines 25-36);

detecting motion (column 7, lines 8-14 and column 8, lines 43-52).

However, Sotoda is silent about specific details regarding the step of:

removing the flesh color from the captured video.

In the same field of endeavor, however, Doi discloses a detection system which includes an image capture section for capturing a distance image indicating distance

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information to a subject comprising removing the flesh color from the captured video (column 12, lines 62-67 and column 13, lines 1-6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of removing the flesh color from the captured video as taught by Doi in the system of Sotada because Doi provides Sotada an object detection system which is capable of high-speed, robust object detection and can easily be minimized, and a motion control system and pattern recognition apparatus both using the object detection system.

Regarding claim 2, Sotada is silent about the method wherein including controlling a processor-based system based on the detection of flesh color and the detection of a shape associated with a human being.

In the same field of endeavor, however, Doi discloses a detection system which including controlling a processor-based system based on the detection of flesh color and the detection of a shape associated with a human being (column 12, lines 62-67 and column 13, lines 1-6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of detection of flesh color and the detection of a shape associated with a human being as taught by Doi in the system of Sotada because Doi provides Sotada an object detection system which is capable of high-speed, robust object detection and can easily be minimized, and a motion control system and pattern recognition apparatus both using the object detection system.

Claim 3, is similarly analyzed as claims 1 and 2 above.

Regarding claim 4, Sotoda discloses the method wherein including capturing a frame of video at a time, and determining after capturing each frame whether or not flesh color has been detected (column 9, lines 18-35).

Regarding claim 6, Sotoda discloses the method wherein including moving an animation object while capturing video and removing the detected flesh color from the captured video (column 16, lines 25-28 and column 22, lines 51-65).

Regarding claim 7, Sotoda discloses the method wherein including capturing video of an animation object in a plurality of different positions and automatically removing an image of a user's hand from the captured video (column 8, lines 57-64).

Claim 8, is similarly analyzed as claims 1 above.

Claim 9, is similarly analyzed as claims 2 above.

Claim 10, is similarly analyzed as claims 3 above.

Claim 11, is similarly analyzed as claims 4 above.

Claim 13, is similarly analyzed as claims 7 above.

Regarding claim 14, Sotoda discloses a system comprising:
a processor (column 12, lines 41-58).

However, Sotoda is silent about specific details regarding the step of:

a storage coupled to said processor-storing instructions that enable the processor to detect motion and a color characteristic and remove the color characteristic from captured video.

In the same field of endeavor, however, Doi discloses a detection system which includes an image capture section for capturing a distance image indicating distance

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information to a subject comprising a storage coupled to said processor-storing instructions that enable the processor to detect motion and a color characteristic and remove the color characteristic from captured video (column 13, lines 1-6 and 23-41). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of a storage coupled to said processor-storing instructions that enable the processor to detect motion and a color characteristic and remove the color characteristic from captured video as taught by Doi in the system of Sotada because Doi provides Sotada an object detection system which is capable of high-speed, robust object detection and can easily be minimized, and a motion control system and pattern recognition apparatus both using the object detection system.

Claim 15, is similarly analyzed as claims 2 above.

Claim 16, is similarly analyzed as claims 3 above.

Regarding claim 17, Sotada discloses the system wherein including a digital imaging device coupled to said processor (column 3, lines 62-67 and column 5, lines 25-44).

Claim 28, is similarly analyzed as claims 1 above.

Claim 29, is similarly analyzed as claims 28 above.

Claim 30, is similarly analyzed as claims 6 above.

4. Claims 18, 20-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Ippolito et al (U S 6,072,522) in view of Uehara et al (U S 4,961,177).

Regarding claim 18, Ippolito discloses video conferencing system for group video conferencing comprising:

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capturing a video image of a speaker (column 13, lines 46-52);
receiving audio information from the speaker through at least one
microphone (Column 5, lines 30-40).

However, Ippolito is silent about specific details regarding the steps of:

determining the user's position; and,
based on the user's position, adjusting a characteristic of the microphone.

In the same field of endeavor, however, Uehara discloses a method and system for
inputting a voice through a microphone comprising the steps of:

determining the user's position (column 4, lines 3-9); and,
based on the user's position, adjusting a characteristic of the microphone
(column 3, lines 28-32).

It would have been obvious to a person of ordinary skill in the art at the time the
invention was made to use the steps of user's position and adjusting microphone as
taught by Uehara in the system of Ippolito because Uehara provides Ippolito a system
which can collect voice data from a person at a high S/N ratio without impairing the
usefulness and operability of the voice input system.

Regarding claim 20, Ippolito is silent about the method wherein including tracking
the user's facial position in two dimensions and estimating the user's facial position in a
third dimension.

In the same field of endeavor, however, Uehara discloses a method and system for
inputting a voice through a microphone comprising the steps of:

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tracking the user's facial position in two dimensions and estimating the user's facial position in a third dimension (column 4, lines 12-22).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of tracking the user's facial position in three dimensions as taught by Uehara in the system of Ippolito because Uehara provides Ippolito a system which can collect voice data from a person at a high S/N ratio without impairing the usefulness and operability of the voice input system.

Regarding claim 21, Ippolito is silent about the method wherein including tracking the user's facial position in three dimensions.

In the same field of endeavor, however, Uehara discloses a method and system for inputting a voice through a microphone comprising the steps of:

tracking the user's facial position in three- dimensions (column 4, lines 12-22).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of tracking the user's facial position in three dimensions as taught by Uehara in the system of Ippolito because Uehara provides Ippolito a system which can collect voice data from a person at a high S/N ratio without impairing the usefulness and operability of the voice input system.

Regarding claim 22, Ippolito is silent about the method wherein including using a point of source filter to adjust the audio information received from the user and providing said adjusted audio information to a speech recognition engine.

In the same field of endeavor, however, Uehara discloses a method and system for inputting a voice through a microphone comprising the step of:

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adjusted audio information (column 4, lines 23-35 and column 5, lines 5-15).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of adjusted audio information as taught by Uehara in the system of Ippolito because Uehara provides Ippolito a system which can collect voice data from a person at a high S/N ratio without impairing the usefulness and operability of the voice input system.

Claim 23, is similarly analyzed as claims 18 above.

Regarding claim 24, Ippolito discloses the system wherein including a pair of video cameras for capturing an image of said user (column 4, lines 9-24).

Claim 25, is similarly analyzed as claims 20 above.

Claim 26, is similarly analyzed as claims 21 above.

Claim 27, is similarly analyzed as claims 22 above.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ippolito et al (U S 6,072,522) and Uehara et al (U S 4,961,177) as applied to claims 18 and 23 above, and further in view of Salisbury (U S 5,917,775).

Regarding claim 19, Ippolito and Uehara are silent about the method wherein including receiving audio information from a pair of microphones and adjusting the sensitivity of the microphones based on the relative positioning of the user with respect to each microphone.

In the same field of endeavor, however, Salibury discloses adjusting the sensitivity of the microphone based on the relative positioning of the user with respect to each microphone (column 4, lines 33-39).

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use adjusting the sensitivity of the microphone based on the relative positioning of the user with respect to each microphone as taught by Salisbury in the system of Ippolito because Salisbury provides Ippolito a system which a microphone for detecting pre-set sensitivity levels and the system is capable to detecting the discharge of a firearm and transmitting an alerting signals to a predetermined location of discharge.

Other prior art cited

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Girod (6,483,532 B1) disclose a video-assisted audio signal processing system and method.

Correa (6,024,337) disclose a computer monitor utility assembly.

Drumm (5,426,450) disclose hands-free hardware keyboard.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (703) 306-5917.

The examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mehta Bhavesh M, can be reached at (703) 308-5246.

Any response to this action should be mailed to:

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Assistant Commissioner for Patents

Washington, D.C. 20231

Or faxed to:

(703) 872-9306 (for **formal** communications; please mark

"EXPEDITED PROCEDURE")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).

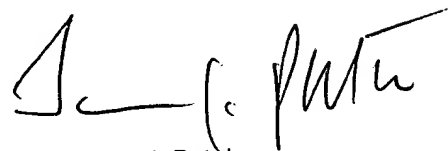
Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 305-4750

Abolfazl Tabatabai

Patent Examiner

Group Art Unit 2625

January 8, 2004

A handwritten signature in black ink, appearing to read 'Jayanti K. Patel', is written over the printed name and title.

Jayanti K. Patel
Primary Examiner